This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s dihydroerythromycin
L1          29 DIHYDROERYTHROMYCIN

=> s l1 and descladinosyl
            15 DESCLADINOSYL
L2           0 L1 AND DESCLADINOSYL

=> d l1 1-29 an ab
```

L1 ANSWER 1 OF 29 CA COPYRIGHT 2007 ACS on STN
AN 146:45672 CA
AB The synthesis of a new class of 9-(S)-dihydroerythromycin derivs. and their antiinflammatory activity on in vivo PMA assay are described. Modifying the desosamine sugar on the C-3' amino group, it was possible to differentiate between antibiotic and antiinflammatory action. The compds. are completely devoid of antimicrobial effects but their antiinflammatory properties are enhanced. These results strongly suggest the potential of macrolides new class of antiinflammatory agents.

L1 ANSWER 2 OF 29 CA COPYRIGHT 2007 ACS on STN
AN 143:194182 CA
AB Azithromycin is prepared in high yield and selectivity by the chemoselective methylation of 9-Deoxo-9a-aza-9a-homoerythromycin A (I) in a boiling chlorinated hydrocarbon medium (e.g., dichloromethane) in the presence of formic acid, taken in the amount from 0.1-0.2 part per one part of I, and paraformaldehyde is used as a methylating agent taken in the amount of 0.05-0.2 part per one part of I.

L1 ANSWER 3 OF 29 CA COPYRIGHT 2007 ACS on STN
AN 139:338141 CA
AB Synthetic studies on methylation of erythromycin derivs. were conducted. Methylation resulted in the formation of the C-3' quaternary ammonium salts with a rate faster than 6-O-methylation. In dipolar aprotic solvent and under strong base conditions, 6-O-methylation, C-3' quaternary ammonium salts formation and 2-C-methylation proceeded simultaneously to yield a mixture of three different products. The quaternary ammonium salts were converted back to the corresponding tertiary amines and starting material by employing sodium 4-pyridinethiolate as a N-demethylation reagent. The 6-O-methylation was eventually achieved in a good yield when a carbobenzyloxy (Cbz) group was utilized to protect the C-3'-dimethylamino group. In this report, the authors discuss the details of different reaction courses in the methylation of (9S)-12, 21-anhydro-9-dihydroerythromycin A derivs.

L1 ANSWER 4 OF 29 CA COPYRIGHT 2007 ACS on STN
AN 138:170458 CA
AB 11A-azalide compds. represented by the following general formula (I), which are erythromycin derivs., or pharmaceutically acceptable salts thereof [wherein R1 = H, C1-10 alkyl, cyanomethyl, C2-6 alkenyl, (un)substituted aralkyl, arylalkenyl, arylalkynyl, or CONH2, N-(un)substituted aminoalkyl, etc.; R2 = H, HO, C1-10 alkoxy, halomethyloxy, C3-6 alkenyloxy, C3-6 alkynyloxy, (un)substituted aralkyloxy, arylalkenyloxy, or arylalkynyloxy; R3 = H, acetyl, benzoyl, benzyloxycarbonyl, (un)substituted aralkyl , C1-6 trialkylsilyl; R4, R5 = H, Me; R6 = Q, Q1, N(aminoalkyl)carbamoyl, acyloxy (wherein R13 = a group listed in R3); R7 = H or R6 and R7 together represent oxo; R8 = H, halo, OH; X = CO, C(:NOR17), N-(un)substituted CHNH2, (un)substituted NHCH2 or CH2NH; Y = (CR24R25)k (wherein k = an integer of 2-4; R24, R25 = H, C1-10 alkyl, C2-10 alkenyl, C2-10 alkynyl, (un)substituted aryl, aralkyl, or arylalkynyl, etc.); Z = NR29 (wherein R29 = H, C1-6 alkyl)] are prepared